



TMHY 04/15/03 6395-64907 182631.doc

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED
APR 22 2003
TECH CENTER 1600/2900

Inventor application of: Chang

Application No. 09/701,536

Filed: November 19, 2000

For: NUCLEIC ACID VACCINES FOR
PREVENTION OF FLAVIVIRUS INFECTION

Examiner: Not yet known

Date: April 15, 2003

Art Unit: 1642

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service on April 15, 2003 as First Class Mail in an envelope addressed to: COMMISSIONER FOR PATENTS, WASHINGTON, D.C. 20231.

Tanya M. Harding, Ph.D.
Attorney for Applicant

INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 C.F.R. § 1.97(b)(3)

COMMISSIONER FOR PATENTS
WASHINGTON, DC 20231

Listed on the accompanying form PTO-1449 and enclosed herewith are several English-language documents and one French-language document with an English-language abstract. Applicant respectfully requests that these documents be listed as references cited on the issued patent.

Applicant filed this Information Disclosure Statement ("IDS") before the mailing date of a first Office action on the merits. As a result, no fee should be required to file this IDS. However, if the Patent Office determines that a fee is required for Applicant to file this Information Disclosure Statement, please see the attached transmittal letter for deposit account authority.

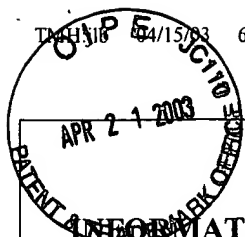
Respectfully submitted,

KLARQUIST SPARKMAN, LLP

By

Tanya M. Harding, Ph.D.
Registration No. 42,630

One World Trade Center, Suite 1600
121 S.W. Salmon Street
Portland, Oregon 97204
Telephone: (503) 226-7391
Facsimile: (503) 228-9446



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	6395-64907
Application Number	09/701,536
Filing Date	November 19, 2000
First Named Inventor	Chang
Art Unit	1642
Examiner Name	Not yet known

U.S. PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Number	Date	Name
		4,810,492	March 7, 1989	Fujita <i>et al.</i>
		5,021,347	June 4, 1991	Yasui <i>et al.</i>
		5,229,293	July 20, 1993	Matsuura <i>et al.</i>
		5,494,671	Feb. 27, 1996	Lai <i>et al.</i>
		5,514,375	May 7, 1996	Paoletti <i>et al.</i>
		6,074,865	June 13, 2000	Kelly <i>et al.</i>

FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Number	Date	Country
		WO 92/02548 (French w/English abstract)	Feb. 20, 1992	WIPO
		WO 93/06214	April 1, 1993	WIPO
		WO 02/072036	Sept. 19, 2002	WIPO
		WO 02/083903	Oct. 24, 2002	WIPO
		JP 89025725 (English Abstract only)	May 1989	JAPAN
		JP 53133627 (English Abstract only)	November 1978	JAPAN
		JP 63004895 (English Abstract only)	1963	JAPAN
		JP 63105682 (English Abstract only)	May 10, 1988	JAPAN
		JP 65000611 (English Abstract only)	1965	JAPAN

EXAMINER
SIGNATURE:

DATE
CONSIDERED:

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.



RECEIVED
APR 22 2003
TECH CENTER 160012900

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	6395-64907
Application Number	09/701,536
Filing Date	November 19, 2000
First Named Inventor	Chang
Art Unit	1642
Examiner Name	Not yet known

		JP 67025408 (English Abstract only)	1967	JAPAN
		JP 7265093 (English Abstract only)	October 1995	JAPAN
Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS		
		Anderson <i>et al.</i> , "Isolation of West Nile Virus from Mosquitoes, Crows, and a Cooper's Hawk in Connecticut," <i>Science</i> 286(5448):2331-2333, Dec. 17, 1999		
		Asnis <i>et al.</i> , "The West Nile Virus Outbreak of 1999 in New York: The Flushing Hospital Experience," <i>Clin. Infect. Dis.</i> 30: 413-418, 2000		
		Azevedo <i>et al.</i> , "Main features of DNA-based immunization vectors," <i>Braz. J. Med. Biol. Res.</i> 32(2):147-153, 1999		
		Bray <i>et al.</i> , "Mice Immunized with Recombinant Vaccinia Virus Expressing Dengue 4 Virus Structural Proteins with or without Nonstructural Protein NSI Are Protected Against Fatal Dengue Virus Encephalitis," <i>J. Virol.</i> 63(6):2853-2856, June 1989		
		Chang <i>et al.</i> , "A Single Intramuscular Injection of Recombinant Plasmid DNA Induces Protective Immunity and Prevents Japanese Encephalitis in Mice," <i>J. Virol.</i> 74(9):4244-4252, May 2000		
		Davis <i>et al.</i> , "West Nile Virus Recombinant DNA Vaccine Protects Mouse and Horse from Virus Challenge and Expresses in Vitro a Noninfectious Recombinant Antigen That Can Be Used in Enzyme- Linked Immunosorbent Assays," <i>J. Virol.</i> 75(9):4040-4047, 2001 (published on-line April 4, 2001)		
		Deubel <i>et al.</i> , "Nucleotide Sequence and Deduced Amino Acid Sequence of the Structural Proteins of Dengue Type 2 Virus, Jamaica Genotype," <i>Virology</i> 155:365-377, 1986		
		Deubel <i>et al.</i> , "Nucleotide Sequence and Deduced Amino Acid Sequence of the Nonstructural Proteins of Dengue Type 2 Virus, Jamaica Genotype: Comparative Analysis of the Full-Length Genome," <i>Virology</i> 165:234-244, 1988		
		Dmitriev <i>et al.</i> , "Immunization with recombinant vaccinia viruses expressing structural and part of the nonstructural region of tick-borne encephalitis virus cDNA protect mice against lethal encephalitis," <i>J. Biotechnol.</i> 44:97-103, 1996		
		Duarte dos Santos <i>et al.</i> , "Complete nucleotide sequence of yellow fever virus vaccine strains 17DD and 17D-213," <i>Virus Res.</i> 35:35-41, 1995		
		Falgout <i>et al.</i> , "Proper Processing of Dengue Virus Nonstructural Glycoprotein NSI Requires the N-Terminal Hydrophobic Signal Sequence and the Downstream Nonstructural Protein NS2a," <i>J. Virol.</i> 63(5):1852-1860, May 1989		
		Falgout <i>et al.</i> , "Immunization of Mice with Recombinant Vaccinia Virus Expressing Authentic Dengue Virus Nonstructural Protein NSI Protects Against Lethal Dengue Virus Encephalitis," <i>J. Virol.</i> 64(9):4356-4363, 1990		
		Fonseca <i>et al.</i> , "Recombinant vaccinia viruses co-expressing dengue-1 glycoprotein prM and E induce neutralizing antibodies in mice," <i>Vaccine</i> 12(3):279-285, 1994		

EXAMINER
SIGNATURE:

DATE
CONSIDERED:

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	6395-64907
Application Number	09/701,536
Filing Date	November 19, 2000
First Named Inventor	Chang
Art Unit	1642
Examiner Name	Not yet known

TECH CENTER
APR 21 2003

RECEIVED

		Mackow <i>et al.</i> , "The Nucleotide Sequence of Dengue Type 4 Virus: Analysis of Genes Coding for Nonstructural Proteins," <i>Virology</i> 159:217-228, 1987
		Mandl <i>et al.</i> , "Complete Genomic Sequence of Powassan Virus: Evaluation of Genetic Elements in Tick-Borne Versus Mosquito-Borne Flaviviruses," <i>Virology</i> 194:173-184, 1993
		Martin <i>et al.</i> , "Standardization of Immunoglobulin M Capture Enzyme-Linked Immunosorbent Assays for Routine Diagnosis of Arboviral Infections," <i>J. Clin. Microbiol.</i> 38(5):1823-1826, May 2000
		Mir <i>et al.</i> , "High-efficiency gene transfer into skeletal muscle mediated by electric pulses," <i>Proc. Nat. Acad. Sci. USA</i> 96:4262-4267, April 1999
		Monath, "Flaviviruse," <i>Virology</i> (R.N. Fields, ed.)-763-814, 1990
		Nitayaphan <i>et al.</i> , "Nucleotide Sequence of the Virulent SA-14 Strain of Japanese Encephalitis Virus and Its Attenuated Vaccine Derivative, SA-14-14-2," <i>Virology</i> 177:541-552, 1990
		Osatomi <i>et al.</i> , "Nucleotide Sequence of Dengue Type 3 Virus Genomic RNA Encoding Viral Structural Proteins," <i>Virus Genes</i> 2(1):99-108, 1988
		Pincus <i>et al.</i> , "Recombinant vaccinia virus producing the prM and E proteins of yellow fever virus protects mice from lethal yellow fever encephalitis," <i>Virology</i> 187:290-297, 1992
		Ramelow <i>et al.</i> , "Detection of tick-borne encephalitis virus RNA in ticks (<i>Ixodes ricinus</i>) by the polymerase chain reaction," <i>J. Virol. Meth.</i> 45:115-9, 1993
		Rice <i>et al.</i> , "Nucleotide Sequence of Yellow Fever Virus: Implications for Flavivirus Gene Expression and Evolution," <i>Science</i> 229:726-733, August 23, 1985
		Roehrig <i>et al.</i> , "Identification of Epitopes on the E Glycoprotein of Saint Louis Encephalitis Virus Using Monoclonal Antibodies," <i>Virology</i> 128:118-126, 1983
		Roehrig <i>et al.</i> , "Synthetic Peptides Derived from the Deduced Amino Acid Sequence of the E-Glycoprotein of Murray Valley Encephalitis Virus Elicit Antiviral Antibody," <i>Virology</i> 171:49-60, 1989
		Sato <i>et al.</i> , "Immunostimulatory DNA Sequences Necessary for Effective Intradermal Gene Immunization," <i>Science</i> 273(5273):352-354, July 19, 1996
		Schalich, <i>et al.</i> , "Recombinant subviral particles from tick-borne encephalitis virus are fusogenic and provide a model system for studying flavivirus envelope glycoprotein functions," <i>J. Virol.</i> 70:4549-4557, July 1996
		Sela. The Choice of Carrier. <i>Synthetic Vaccines Volume I</i> (edited by Arnon) CRC Press Inc.. Boca Raton, FL. pp. 83-92, 1987
		Sumiyoshi <i>et al.</i> , "Complete Nucleotide Sequence of the Japanese Encephalitis Virus Genome RNA," <i>Virology</i> 161:497-510, 1987

EXAMINER
SIGNATURE:

DATE
CONSIDERED:

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	6395-64907
Application Number	09/701,536
Filing Date	November 19, 2000
First Named Inventor	Chang
Art Unit	1642
Examiner Name	Not yet known

TECH CENTER 1600/2900
APR 22 2003

RECEIVED

		Trent <i>et al.</i> , "Partial Nucleotide Sequence of St. Louis Encephalitis Virus RNA: Structural Proteins. NS1 ns2a and ns2b," <i>Virology</i> 156:293-304, 1987
		Zhang <i>et al.</i> , "Immunization of Mice with Dengue Structural Proteins and Nonstructural Protein NSI Expressed by Baculovirus Recombinant Induces Resistance to Dengue Virus Encephalitis," <i>J. Virol.</i> 62(8):3027-3031, August 1988
		Zhang <i>et al.</i> , "Passive Protection of Mice, Goats, and Monkeys Against Japanese Encephalitis With Monoclonal Antibodies," <i>J. Med. Virol.</i> 29:133-138, 1989
		Zhao <i>et al.</i> , "Cloning Full-Length Dengue Type 4 Viral DNA Sequences: Analysis of Genes Coding for Structural Proteins," <i>Virology</i> 155:77-88, 1986
		Zhao <i>et al.</i> , "Expression of Dengue Virus Structural Proteins and Nonstructural Protein NS ₁ by a Recombinant Vaccinia Virus," <i>J. Virol.</i> 61(12):4019-4022, December-1987
		"Update: Surveillance for West Nile Virus in Overwintering Mosquitoes --- New York, 2000," <i>Morb. Mortal. Wkly. Rep.</i> 49(09):178-179, Mar. 10, 2000
		"Update: West Nile Virus Activity --- Northeastern United States, 2000," <i>Morb. Mortal. Wkly. Rep.</i> 49(36):820-822, Sept. 15, 2000

EXAMINER
SIGNATURE:

DATE
CONSIDERED:

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.